

WHAT IS CLAIMED IS:

1 1. An arrangement for monitoring the status of and controlling
2 the functions of aircraft cabin systems selected from a
3 cabin information system, a cabin audio system, a cabin
4 video system, a cabin lighting system, a cabin air
5 conditioning system, a cabin smoke detector system, an
6 aircraft door monitoring system, and a water supply and
7 wastewater system,

8 wherein said arrangement comprises a user interface
9 panel comprising a liquid crystal display screen and a
10 touch sensitive surface input arrangement superimposed at
11 least partly over said display screen,

12 wherein said user interface panel includes a basic
13 layout including a general display area of said display
14 screen and a plurality of touch input keys respectively
15 labeled with system or function identifying symbols,

16 wherein said arrangement further comprises a first
17 system menu associated with a first one of said cabin
18 systems and a second system menu associated with a second
19 one of said cabin systems,

20 wherein said first system menu can be selectively
21 displayed on said general display area whereby said first
22 system menu shows status information and operating
23 functions of said first cabin system and allows a user to
24 select and control said operating functions of said first
25 cabin system via said touch sensitive surface input
26 arrangement, and

wherein said second system menu can be selectively displayed on said general display area whereby said second system menu shows status information and operating functions of said second cabin system and allows a user to select and control said operating functions of said second cabin system via said touch sensitive surface input arrangement.

2. The arrangement according to claim 1, wherein said touch input keys respectively comprise respective touch input areas of said touch sensitive surface input arrangement, and said system or function identifying symbols are displayed on said display screen at locations respectively in registration with said touch input areas of said touch sensitive surface input arrangement.

3. The arrangement according to claim 1, wherein said touch input keys are permanent physical input keys separate and distinct from said touch sensitive surface input arrangement.

4. The arrangement according to claim 1, further comprising a computer connected to said user interface panel, and software to be executed in said computer for generating and displaying at least said first system menu and said second system menu on said general display area, and for evaluating and processing touch input signals from said touch sensitive surface input arrangement to select and

control said operating functions of said first and second cabin systems.

5. The arrangement according to claim 1, wherein said arrangement further comprises a main menu that is linked between said basic layout and said system menus, can be selectively displayed on said general display area, depicts essential information representing system status about at least said first and second cabin systems, and allows the user to select a desired one of said first and second system menus from said main menu.

6. The arrangement according to claim 1, wherein said basic layout further includes a header line which displays an identification of a respective active one of said menus that is being displayed on said general display area.

7. The arrangement according to claim 1, wherein said touch input keys of said basic layout are maintained available and accessible to the user continuously and regardless which of said menus is being displayed on said general display area.

8. The arrangement according to claim 1, wherein said user interface panel comprises a versatile adaptable touch sensitive screen that incorporates both said display screen and said touch sensitive surface input arrangement.

1 9. The arrangement according to claim 1, wherein said first
2 cabin system is said cabin audio system, said first system
3 menu is a cabin audio system menu, and said cabin audio
4 system menu includes display indicators and input buttons
5 for the user to monitor, select and play pre-recorded
6 announcements of said cabin audio system and to monitor and
7 adjust an on-board music channel of said cabin audio
8 system.

1 10. The arrangement according to claim 9, wherein said display
2 indicators and said input buttons include a numerical
3 display field and an input keypad, which enable the user to
4 input a corresponding number to select a desired one of the
5 pre-recorded announcements.

1 11. The arrangement according to claim 9, wherein said display
2 indicators and said input buttons allow all of the
3 pre-recorded announcements to be queued and played in
4 sequence.

1 12. The arrangement according to claim 1, wherein said first
2 cabin system is said cabin lighting system, said first
3 system menu is a cabin lighting system menu, and said cabin
4 lighting system menu includes display indicators and input
5 buttons for the user to monitor, select and adjust said
6 cabin lighting system respectively individually for various
7 different areas in an aircraft cabin.

1 13. The arrangement according to claim 12, wherein said display
2 indicators and input buttons provide three selectable
3 brightness levels of illumination by said cabin lighting
4 system in cabin entry zones in an aircraft cabin.

1 14. The arrangement according to claim 1, wherein said first
2 cabin system is said aircraft door monitoring system, said
3 first system menu is a door monitoring system menu, and
4 said door monitoring system menu includes display
5 indicators that represent each door and hatch of the
6 aircraft and indicate a respective status thereof.

1 15. The arrangement according to claim 1, further comprising a
2 status menu that can be selectively displayed on said
3 general display area, whereby said status menu displays
4 status information respectively regarding all of said cabin
5 systems.

1 16. The arrangement according to claim 1, further comprising a
2 programming menu that can be selectively displayed on said
3 general display area, whereby said programming menu
4 includes display indicators and input buttons to allow the
5 user to program functions of a plurality of said cabin
6 systems.

1 17. A method of operating the arrangement according to claim 5,
2 comprising the following steps carried out by a user:

- 3 a) touching a respective one of said touch input keys
4 labeled with a respective one of said system
5 identifying symbols associated with a desired one of
6 said system menus or said main menu to call up and
7 display said desired one of said system menus or said
8 main menu on said general display area;
- 9 b) if said main menu is displayed on said general display
10 area, then touching a portion of said main menu
11 corresponding to a desired one of said system menus on
12 said touch sensitive surface input arrangement
13 superimposed over said general display area;
- 14 c) when said desired one of said system menus is
15 displayed on said general display area, touching a
16 portion of said desired one of said system menus
17 corresponding to a desired one of said operating
18 functions on said touch sensitive surface input
19 arrangement superimposed over said general display
20 area so as to select and adjust said desired one of
21 said operating functions of a desired one of said
22 cabin systems associated with said desired one of said
23 system menus.